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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

PYZOCHA, MICHAEL J

ART UNIT

PAPER NUMBER

2137

DATE MAILED: 07/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/780,573

Applicant(s)

BANDY ET AL.

Examiner

Michael Pyzocha

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 February 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

1. Claims 1-42 are pending.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a) because they fail to show "printer 508" as described in paragraph 55 line 6 of the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion

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of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities: In paragraph 45 line five "402" should be "302". In paragraph 55 line 2 "106" should be "306".

Appropriate correction is required.

Claim Objections

4. Claim 39 is objected to because of the following informalities: "infrared" should be "infra-red". Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-7 and 38-39 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point

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out and distinctly claim the subject matter which applicant regards as the invention.

7. Claim 1 recites the limitation "an article" in line 7. There is insufficient antecedent basis for this limitation in the claim. It is unclear if the article of line 7 is the same as the article of line 3.

8. Claims 38-39 recite the limitation "said latent marking" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Any claims not specifically addressed are rejected by virtue of their dependencies.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 1-6 and 19-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Kaish et al (U.S. 5,974,150).

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As per claims 1 and 19, Kaish et al discloses reading a first pattern marking an article (see column 27 lines 20-24). Encoding the pattern into a data set (see column 27 lines 24-28). Transforming the first data set into a second data set (see column 27 lines 28-30). Converting the second data set into a second pattern (see column 27 lines 32-40). Marking the article with the pattern (see column 27 lines 24-25).

As per claims 2 and 20, Kaish et al discloses the data sets being numeric sequences (see column 27 lines 24-30).

As per claims 3 and 21, Kaish et al discloses the use of an encryption algorithm (see column 22 lines 38-42).

As per claims 4 and 22, Kaish et al discloses the use of a bar code (see column 22 line 38 and column 27 lines 38-40).

As per claims 5 and 23, Kaish et al discloses one pattern being invisible (see column 21 lines 44-47 where the dye is used on the dichroic fibers).

As per claims 6 and 24, Kaish et al discloses the use of infra-red light spectrum (see column 21 lines 44-47 where the dye is used on the dichroic fibers).

11. Claims 7-11, 13-17, 25-29, and 31-35 are rejected under 35 U.S.C. 102(e) as being anticipated by Coppersmith et al (U.S. 6,069,955).

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As per claims 7 and 25 Coppersmith et al discloses generating a plurality of complementary data sets, converting these sets into patterns and marking an article (see column 3 lines 41-48, where complimentary sets are the encrypted and unencrypted versions of the serial number and the patterns are equivalent to the data sets).

As per claims 8 and 26, Coppersmith et al discloses the complimentary data sets being numeric (see column 3 lines 30-34).

As per claims 9 and 27, Coppersmith et al discloses the generating step being performed by encryption (see column 3 lines 41-48).

As per claims 10 and 28, Coppersmith et al discloses the use of bar codes (see column 4 lines 47-49).

As per claims 11 and 29, Coppersmith et al discloses one of the patterns being invisible (see column 3 lines 47-48).

As per claims 13 and 31, Coppersmith et al discloses reading, converting and comparing the data sets (see column 3 lines 53-59).

As per claims 14 and 32, Coppersmith et al discloses the data sets being numeric sequences (see column 3 lines 31-35 where the labels being read are these serial numbers).

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As per claims 15 and 33, Coppersmith et al discloses the use of an encryption algorithm (see column 3 lines 41-43).

As per claims 16 and 34, Coppersmith et al discloses the use of a bar code (see column 4 lines 47-49).

As per claims 17 and 35, Coppersmith et al discloses one of the patterns being invisible (see column 3 lines 47-48).

12. Claims 37-38 and 40-41 are rejected under 35 U.S.C. 102(e) as being anticipated by Wu et al (U.S. 6,748,533).

As per claim 37, Wu et al discloses a marking representing a data set and a second marking representing another data set with a relationship between the two data sets (see column 12 lines 58-67).

As per claim 38, Wu et al discloses an invisible marking (see column 13 lines 1-4).

As per claim 40, Wu et al discloses the relationship defined by encryption (see column 12 line 65 through column 13 line 1).

As per claim 41, Wu et al discloses the use of a framing image (see column 12 lines 50-53).

13. Claim 42 is rejected under 35 U.S.C. 102(e) as being anticipated by Witschorik (U.S. 6,131,718).

Witschorik discloses a counterfeit monitoring system having a marking, verification and security node (see claim 1 lines 1-5

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where the marking and verification nodes are combined into the currency scanning terminal) connected to a network (see claim 7).

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 12, 18, 30 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coppersmith et al as applied to claims 7 and 25 above, and further in view of Liang (U.S. 5,867,586).

Coppersmith fails to disclose the use of the infra-red light spectrum.

However, Liang discloses the use of the infra-red light spectrum (see column 2 lines 58-61).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the infra-red light spectrum of Liang with the system of Coppersmith.

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Motivation to do so would have been a method to apply invisible markings to an article (see column 2 lines 58-61).

16. Claims 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wu et al as applied to claim 37 above, and further in view of Liang.

Wu et al fails to disclose the use of the infra-red light spectrum.

However, Liang discusses discloses the use of the infra-red light spectrum (see column 2 lines 58-61).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the infra-red light spectrum of Liang with the system of Coppersmith.

Motivation to do so would have been a method to apply invisible markings to an article (see column 2 lines 58-61).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Pyzocha whose telephone number is (703) 305-0712. The examiner can normally be reached on 7:30am - 5:00pm with first Fridays of the bi-week off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be

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reached on (703) 306-3036. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MJP

Andrew Caldwell
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